



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C
 UNIQUE ID NUMBER: 8AL025
 COMBUSTOR: Type 1
 ENGINE TYPE: MTF

BYPASS RATIO: 5.2
 PRESSURE RATIO (π_{00}): 15.8
 RATED THRUST (F_{00}) (kN): 29.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	14.0	65.2	39.0	1.2
AS % OF ORIGINAL LIMIT	71.6	55.2	54.5	3.5
AS % OF CAEP/2 LIMIT (NO _x)			68.1	
AS % OF CAEP/4 LIMIT (NO _x)			68.8	
AS % OF CAEP/6 LIMIT (NO _x)			69.1	
AS % OF CAEP/8 LIMIT (NO _x)			73.2	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.301	0.25	0.94	16.88	1.0
CLIMB OUT	85	2.2	0.253	0.29	1.16	14.57	0.0
APPROACH	30	4.0	0.094	0.70	4.28	6.78	0.0
IDLE	7	26.0	0.038	4.95	26.32	3.36	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			127	320	1695	1050	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				10.8	57.2	35.5	1.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	
AIR HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16-20

MANUFACTURER: Rolls-Royce Corporation
 TEST ORGANIZATION: Rolls-Royce Corporation
 TEST LOCATION: Indianapolis, Indiana
 TEST DATES: 03/03/1994-19/04/1995

REMARKS

- For effectivity see Rolls-Royce Notice to Operators No. AE3007A-076
- Results based on Rolls-Royce report EDR 15171B
- Maximum SN incorrectly entered originally [[6AL021]
- Issue 15; Max SN changed from 0.00 to 1.00 as for take -off; no change to characteristic value

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)